

AMENDMENTS TO THE CLAIMS

Please amend Claims 24, 25, 26, 28, 29, 32 and 35, and add Claims 36-55 as shown in the following listing of the claims:

1.-23. (Canceled).

24. (Currently amended) A method for identifying a candidate therapeutic for fat reduction, which comprises:

~~determining whether a test molecule that interacts *in vitro* with (i) a nucleic acid having a nucleotide sequence of SEQ ID NO:1 or (ii) a protein having an amino acid sequence of SEQ ID NO:1 reduces fat deposition;~~

contacting a test molecule with a PLA2G1B nucleic acid comprising the nucleotide sequence of SEQ ID NO:1; and

detecting interaction between the test molecule and the nucleic acid,

~~whereby a test molecule that reduces fat deposition is identified~~ wherein a test molecule that interacts with the nucleic acid is identified as a candidate therapeutic for fat reduction.

25. (Currently amended) The method of claim 24, wherein the nucleotide sequence of the nucleic acid comprises a guanine at position 7328, or a thymine at position 9182, ~~or a guanine at position 7328 and a thymine at position 9182~~ in SEQ ID NO:1.

26. (Currently amended) The method of claim 24, wherein the test molecule is ~~an organic~~ a small molecule.

27. (Previously presented) The method of claim 24, wherein the test molecule is a nucleic acid.

28. (Currently amended) A method for reducing fat deposition in a subject, which comprises administering a candidate therapeutic ~~of~~ identified in claim 24 to a subject in need thereof, whereby the candidate therapeutic reduces fat deposition in the subject.

29. (Currently amended) A method for identifying a candidate therapeutic for non-insulin diabetes dependent mellitus (NIDDM), which comprises:

~~determining whether a test molecule that interacts *in vitro* with (i) a nucleic acid having a nucleotide sequence of SEQ ID NO:1 or (ii) a protein having an amino acid~~

~~sequence of SEQ ID NO:1 reduces fat deposition;~~

contacting a test molecule with a PLA2G1B nucleic acid comprising the nucleotide sequence of SEQ ID NO:1; and

detecting interaction between the test molecule and the nucleic acid,

~~whereby a test molecule that reduces fat deposition is identified~~ wherein a test molecule that interacts with the nucleic acid is identified as a candidate therapeutic for NIDDM.

30. (Previously presented) The method of claim 29, wherein the NIDDM symptom is insulin sensitivity.
31. (Previously presented) The method of claim 29, wherein the NIDDM symptom is glucose uptake.
32. (Currently amended) The method of claim 29, wherein the test molecule is ~~an organic~~ a small molecule.
33. (Previously presented) The method of claim 29, wherein the test molecule is a nucleic acid.
34. (Previously presented) The method of claim 29, wherein the nucleic acid sequence of the nucleic acid comprises a cytosine at position 7256 of SEQ ID NO:1.
35. (Currently amended) A method for treating NIDDM in a subject, which comprises administering a candidate therapeutic ~~of~~ identified in claim 29 to the subject in need thereof, whereby the candidate therapeutic treats NIDDM in the subject.
36. (New) The method of claim 27, wherein the test molecule is an antisense nucleic acid.
37. (New) The method of claim 24, wherein the test molecule is a ribozyme.
38. (New) The method of claim 24 further comprising testing the candidate therapeutic in an animal model of obesity, wherein the candidate therapeutic is identified as an agent for use in fat reduction if the candidate therapeutic is effective in the animal model.
39. (New) The method of claim 38 wherein the animal model is Israeli sand rats.
40. (New) The method of claim 33, wherein the test molecule is an antisense nucleic acid.
41. (New) The method of claim 29, wherein the test molecule is a ribozyme.

42. (New) A method for identifying a candidate therapeutic for fat reduction, which comprises:
contacting a test molecule with a PLA2G1B polypeptide comprising the amino acid sequence of SEQ ID NO:2; and
detecting interaction between the test molecule and the polypeptide,
wherein a test molecule that interacts with the polypeptide is identified as a candidate therapeutic for fat reduction.
43. (New) The method of claim 42, wherein interaction between the candidate therapeutic and the polypeptide is detected by spectrophotometric assay.
44. (New) The method of claim 42, wherein the test molecule is a small molecule.
45. (New) The method of claim 42, wherein the test molecule is a polypeptide
46. (New) The method of claim 42 further comprising testing the candidate therapeutic in an animal model of obesity, wherein the candidate therapeutic is identified as an agent for use in fat reduction if the candidate therapeutic is effective in the animal model.
47. (New) The method of claim 46, wherein the animal model is Israeli sand rats.
48. (New) A method for reducing fat deposition in a subject, which comprises administering a candidate therapeutic identified in claim 42 to a subject in need thereof, whereby the candidate therapeutic reduces fat deposition in the subject.
49. (New) A method for identifying a candidate therapeutic for non-insulin diabetes dependent mellitus (NIDDM), which comprises:
contacting a test molecule with a PLA2G1B polypeptide comprising the amino acid sequence of SEQ ID NO:2;
detecting interaction between the test molecule and the polypeptide,
wherein a test molecule that interacts with the polypeptide is identified as a candidate therapeutic for NIDDM.
50. (New) The method of claim 49, wherein the NIDDM symptom is insulin sensitivity.
51. (New) The method of claim 49, wherein the NIDDM symptom is glucose uptake.
52. (New) The method of claim 49, wherein interaction between the candidate therapeutic and the polypeptide is detected by spectrophotometric assay.

53. (New) The method of claim 49, wherein the test molecule is a small molecule.
54. (New) The method of claim 49, wherein the test molecule is a polypeptide.
55. (New) A method for treating NIDDM in a subject, which comprises administering a candidate therapeutic identified in claim 49 to the subject in need thereof, whereby the candidate therapeutic treats NIDDM in the subject.